

REMARKS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

After entry of the foregoing amendment, Claims 1 and 4-9 are pending in the present application. Claims 1 and 4-9 are amended; and Claims 2 and 3 are canceled without prejudice or disclaimer. No new matter is added by the present amendment.

In the outstanding Office Action, Claims 1-9 were rejected under 35 U.S.C. 102(e) as anticipated by U.S. Patent No. 6,154,775 to Coss et al. (hereinafter "Coss"). That rejection is moot with respect to canceled Claims 2 and 3; and that rejection is traversed with respect to Claims 1 and 4-9.

a plurality of interfaces connected to individual user networks configured to transmit and receive packets;

a network interconnection controller including a plurality of control function parts, each control function part independently provided for a respective pair of user networks and defining rules for connections between one of terminal addresses in one of said pair of user networks and one of terminal addresses in another one of said pair of user networks; and

a function association selector configured to associate each interface to one of the plurality of control function parts, said function association selector including

a function managing table configured to store an association between each interface and a corresponding one of the control function parts,

an identifier imparting part configured to retrieve an identifier from the function managing table, the identifier identifying the corresponding one of the control function parts associated with a first interface that has received a packet, and configured to impart the identifier to the packet,

a function selector configured to transfer the packet to the control function part identified by the imparted identifier, and

an output interface selector configured to select a second interface corresponding to the identifier imparted to the packet, via the

function managing table, and configured to deliver the packet to the selected interface.<sup>1</sup>

As recited, each control function part is provided for a corresponding pair of user networks indicated by the function managing table. The function association selector selects a control function part associated with an interface that has received a packet, via the function managing table, and transfers the packet to the selected control function part.

Claims 4-9 depend directly or indirectly from Claim 1.

Since each control function part controls the connection between only a pair of user networks, the claimed invention allows for multiple usage of a same address by terminals that are respectively located in user networks between which connection is inhibited. For example, by selecting the control function part, the claimed invention can prevent a packet from being transmitted to an incorrect user network, even if the incorrect and correct user networks each include respective terminals having identical addresses; and even if there are errors in the connection rules of the system's control function parts which would have otherwise allowed the packet to pass to an incorrect user network.

The outstanding Office Action cites Coss as teaching the claimed invention. However, the firewall processors are provided in fixed relations to the user sites 101-104; and rules for packet transmission are sequentially applied until the packet satisfies a rule (i.e., the packet is passed) or the rule table is exhausted (i.e., the packet is dropped). Thus, since a fire wall processor is not assigned and selected for a particular pair of user networks, an unintentional connection may occur if the destination user network and an incorrect user network each include respective terminals having identical addresses; or if there are errors in the connection rules of a firewall processor which would otherwise allow a packet to be improperly passed to an incorrect user network.

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<sup>1</sup> Support for amended Claim 1 is self-evident from at least Claims 1-4 as originally filed.

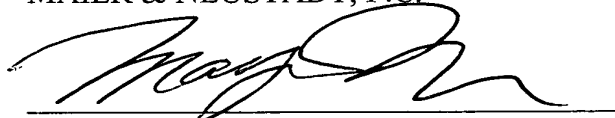
Application No. 09/842,138  
Reply to Office Action of August 25, 2004

Accordingly, for the reasons stated above, Applicant respectfully requests that the 35 U.S.C. 102(e) rejection of Claims 1 and 4-9 be withdrawn.

Consequently, in light of the above discussion and in view of the present amendment, the present application is believed to be in condition for allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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